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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,770	11/04/2003	Todd C. Warden	YOR920030566 (00280761AA)	5896
45773 7590 02/09/2009 WHITHAM, CURTIS & CHRISTOFFERSON, P.C. 11491 SUNSET HILLS ROAD, SUITE 340 RESTON, VA 20190				
EXAMINER				
NGUYEN, THUY-VI THI				
ART UNIT		PAPER NUMBER		
3689				
MAIL DATE		DELIVERY MODE		
02/09/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/699,770

**Applicant(s)**

WERDEN, TODD C.

**Examiner**

THUY VI NGUYEN

**Art Unit**

3689

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 October 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-11 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 26, 2008 has been entered.

2. This is in response to the applicant's communication filed on October 03, 2008, wherein:

Claims 1-6, 7-11 are currently pending;

Claims 1, 3-6, 7 have been amended;

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over MCQUEEN ET AL (US 6,069,696) in view of GU (US 6,606,579) and further in view of WARGON (US 2004/0153283).

**As for claims 1 and 7** MCQUEEN ET AL disclose a system/method of determining a product weight and calculating price comprising:

a) means/step for generating a digitized image of the product with a camera;  
{see col. 9, lines 65-67. col. 10, lines 1-11, col. 16, lines 19-36 and figure 11}

b) means/step for identifying the product by type using the digitalize image;  
{see col. 9, lines 65-67. col. 10, lines 1-11, col. 16, lines 19-36 and figure 11,

disclose the item/object 810 is identified using the imaging camera

c) means/step for determining a volume of the product from the digitized image of the product;

{see col. 14, lines 65-67, col. 15, lines 1-2 discloses the object volume can be calculated from multiple images of an object moving relative to the imager (e.g. camera);

d) means/step for determining a density for the product type identified in the identifying step

{see col. 15, lines 1-9 disclose the calculating object density},

e) computer terminal for computing or determining a weight of the product {see col. 4, lines 3-17 and figure 2; col. 14, lines 60-67, col. 15, lines 1-5},

f) calculating a price of the product as a function of a calculated weight and a price/weight ratio;

{see figure 2 (display 62), col. 4, lines 3-33 disclose the calculating a price of an object as price/weight}

MCQUEEN ET AL disclose all the claim invention stated above except for the additional feature in step (d) by accessing a database of densities of a plurality of products/object; and calculating the weight as a function of volume and density (step

e). Note that in claim 1, the last element, " a computer terminal", the phrase "which computes ...of price/weight ratio." has no patentable weight in an apparatus claim.

Note: claim 1 is an apparatus claim. In examination of the apparatus claim, the claims must be structurally distinguishable from the prior art. While features of an apparatus claim may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. See MPEP 2114. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). Apparatus claims cover what a device is, not what a device does. *Hewlett-Packard Co. vs. Bausch & Lomb Inc.* (Fed. Circ. 1990). Manner of operating the device or elements of the device, i.e. recitation with respect to the manner in which a claimed apparatus is intended to be employed/used, does not differentiate apparatus from the prior art apparatus. *Ex parte Masham*, 2 USPQ2d 1647 (BPAI, 1987).

In the similar method for determining the object properties such as size, shape, texture information, and identity, etc. using a camera, **GU** fairly discloses a means/step for determining a density of the identified object by accessing a database/library (30) of densities of a plurality of products/object for improving speed and accuracy of product recognition which is important in a check out environment. {see col. 1, lines 35-60, col. 2, lines 25-55, Fig. 1 element 30, and fig. 7, element 30 col. 7, lines 8-14}. It would have been obvious to modify the teachings of **MCQUEEN ET AL** by using a means/step (d) for determining a density of the identified object by accessing a database/library (30) of densities of a plurality of products/object in means/step of as

taught by GU for improving speed and accuracy of product recognition which is important in a check out environment.

The teachings of MCQUEEN ET AL/GU do not teach calculating the weight as a function of volume and density (step e).

In the similar method for determining the object properties such as size, shape, texture information, and identity, WARGON fairly disclose the calculating weight of an item as a function of volume and density for quickly providing an indication of the weight or cost more quickly and accurately {see pars. 0004-0006; and pars 0010-0012}. It would have been obvious to modify the teachings of MCQUEEN ET AL/GU by using a means/step (e) for calculating a weight of a product as a function of volume and density as taught by WARGON quickly providing an indication of the weight or cost more quickly and accurately which is important in a check out environment.

**As for claim 2**, which deals with the apparatus is part of a checkout station in a retail store, this is fairly taught in MCQUEEN ET AL {see figure 2, col. 15, lines 13-20}

**As for claims 3 and 8**, which deals with connecting to the computer terminal for displaying information e.g. price of the product, this is fairly taught in MCQUEEN ET AL {see figures 2, 11-12}.

**As for claims 4 and 9**, which deals with generating a total of prices for a plurality of product and displaying a total price, this is fairly taught in MCQUEEN ET AL {see figure 2}.

**As for claims 5 and 10**, which deals with a well known feature e.g. a printer connected to the computer terminal for printer the total cost, this is fairly taught in MCQUEEN ET AL {col. 30-40}.

**As for claims 6 and 11**, which deals with the categorizing the product within one of a plurality of weight ranges, which are used to determine the price, this is fairly taught in MCQUEEN ET AL {see figures 2, col. 4, lines 3-17}.

### ***Response to Arguments***

5. Applicant's arguments on 11/26/08 with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy-Vi Nguyen whose telephone number is 571-270-1614. The examiner can normally be reached on Monday through Thursday from 8:30 A.M to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janice Mooneyham can be reached on 571-272-6805. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. N./

Examiner, Art Unit 3689

/Tan Dean D. Nguyen/  
Primary Examiner, Art Unit 3689  
February 4, 2009